

LAMPIRAN

Lampiran 1

Hasil Uji Angka Lempeng Total

Pengenceran Perlakuan	10^{-4}	10^{-5}	10^{-6}	10^{-7}	10^{-8}	10^{-9}	Jml. Bakteri (Sel/gram)
K ₀	216	131	7				$7,83 \times 10^6$
	186	142	8				
K ₁		95	40	181			$3,171 \times 10^7$
		45	73	10			
K ₂				3	3	11	$9,5 \times 10^9$
				TMCC	95	4	
P ₀ R ₀	25	0	10				$2,5 \times 10^5$
	TMCC	6	1				
P ₁ R ₀	TMCC	TMCC	3				$10,7 \times 10^5$
	107	33	18				
P ₂ R ₀	37	4	8				$3,2 \times 10^5$
	27	7	10				
P ₀ R ₁				10	98	2	$1,0 \times 10^8$
				Spreader	7	5	
P ₁ R ₁			61	41	18		$3,55 \times 10^8$
			25	30	23		
P ₂ R ₁			Spreader	11	12		$1,1 \times 10^8$
			6	6	152		
P ₀ R ₂				104	34	16	$1,04 \times 10^9$
				8	3	26	
P ₁ R ₂				173	124	105	$4,24 \times 10^9$
				33	25	69	
P ₂ R ₂				Spreader	6	0	$7,3 \times 10^8$
				73	30	0	

Lampiran 2

Hasil angka lempeng total ikan kakap setelah penambahan kombinasi asap cair dan kadar garam (CFU/g)

P \ R	R ₀	R ₁	R ₂
P ₀	2,5 x 10 ⁵	1,0 x 10 ⁸	1,04 x 10 ⁹
P ₁	1,07 x 10 ⁶	3,55 x 10 ⁸	4,24 x 10 ⁹
P ₂	3,2 x 10 ⁵	1,1 x 10 ⁸	7,3 x 10 ⁸
Kontrol	K ₀	K ₁	K ₂
	7,83 x 10 ⁶	3,17 x 10 ⁷	9,5 x 10 ⁹

Keterangan:

K₀ : Kontrol (tanpa penambahan asap cair dan garam) hari ke- 0

K₁ : Kontrol (tanpa penambahan asap cair dan garam) hari ke- 1

K₂ : Kontrol (tanpa penambahan asap cair dan garam) hari ke- 2

P₀ : Dosis asap cair 0 % : garam 20 %

P₁ : Dosis asap cair 1 % : garam 20 %

P₂ : Dosis asap cair 2 % : garam 20 %

R₀ : Lama penyimpanan 0 hari

R₁ : Lama penyimpanan 2 hari

R₂ : Lama penyimpanan 4 hari

Lampiran 3

Hasil Perhitungan Total Mikrobial

1. K_0 (Kontrol hari ke 0)

$$X_4 = \frac{216 + 186}{2} = \frac{402}{2} = 201 \times 10^4 = 2,01 \times 10^6$$

$$X_5 = \frac{131 + 142}{2} = \frac{273}{2} = 136,5 \times 10^5 = 13,65 \times 10^6$$

$$\begin{array}{r} X_4 \quad \square 2 \\ \hline X_5 \end{array}$$

$$\frac{2,01 \times 10^6}{13,65 \times 10^6} \quad \square 2 \quad \Rightarrow \quad \frac{2,01 \times 10^6 + 13,65 \times 10^6}{2}$$

$$= \frac{15,66 \times 10^6}{2}$$

$$= \mathbf{7,83 \times 10^6}$$

2. K_1 (Kontrol hari ke 1)

$$X_5 = \frac{95 + 45}{2} = \frac{140}{2} = 70 \times 10^5 = 7 \times 10^6$$

$$X_6 = \frac{40 + 73}{2} = \frac{113}{2} = 56,5 \times 10^6$$

$$\begin{array}{r} X_4 \quad \square 2 \\ \hline X_5 \end{array}$$

$$\begin{aligned}
 \frac{7 \times 10^6}{56,5 \times 10^6} & \square 2 \Rightarrow \frac{7 \times 10^6 + 56,5 \times 10^6}{2} \\
 & = \frac{63,5 \times 10^6}{2} \\
 & = \mathbf{31,75 \times 10^6}
 \end{aligned}$$

3. K₂ (Kontrol hari ke 2)

$$\begin{array}{c}
 X_8 \geq 2 \\
 \hline
 X_9
 \end{array}$$

$$\begin{array}{c}
 95 \geq 2 \\
 \hline
 28
 \end{array}
 \Rightarrow 95 \times 10^8 = \mathbf{9,5 \times 10^9}$$

4. P₁ (perlakuan 0% Asap Cair, 20% garam. Hari ke 0)

$$\begin{aligned}
 X_4 &= 25 \times 10^4 \\
 &= \mathbf{2,5 \times 10^5}
 \end{aligned}$$

5. P₂ (perlakuan 1% Asap Cair, 20% garam. Hari ke 0)

$$\begin{array}{c}
 X_4 \geq 2 \\
 \hline
 X_5
 \end{array}$$

$$\begin{array}{c}
 107 \geq 2 \\
 \hline
 33
 \end{array}
 \Rightarrow 107 \times 10^4 = \mathbf{10,7 \times 10^5}$$

6. P₃ (perlakuan 2% Asap Cair, 20% garam. Hari ke 0)

$$X_4 = \frac{37 + 27}{2} = \frac{64}{2} = 32 \times 10^4 = \mathbf{3,2 \times 10^5}$$

7. P_4 (perlakuan 0% Asap Cair, 20% garam. Hari ke 2)

$$X_8 = 98 \times 10^8$$

$$= \mathbf{9,8 \times 10^9}$$

8. P_5 (perlakuan 1% Asap Cair, 20% garam. Hari ke 2)

$$X_7 = \frac{41 + 30}{2} = \frac{71}{2} = 35,5 \times 10^7 = \mathbf{3,55 \times 10^8}$$

9. P_6 (perlakuan 2% Asap Cair, 20% garam. Hari ke 2)

$$X_8 = 152 \times 10^8$$

$$= \mathbf{15,2 \times 10^9}$$

10. P_7 (perlakuan 0% Asap Cair, 20% garam. Hari ke 4)

$$\frac{X_7}{X_8} \geq 2$$

$$\frac{104}{34} \geq 2 \implies 104 \times 10^7 = \mathbf{1,04 \times 10^9}$$

11. P_8 (perlakuan 1% Asap Cair, 20% garam. Hari ke 4)

$$X_7 = \frac{173 + 33}{2} = \frac{206}{2} = 103 \times 10^7 = 1,03 \times 10^9$$

$$X_8 = \frac{124 + 25}{2} = \frac{149}{2} = 74,5 \times 10^8 = 7,45 \times 10^9$$

$$\frac{X_7}{X_8} \square 2$$

$$\begin{aligned}
 \frac{1,03 \times 10^9}{7,45 \times 10^9} \div 2 &\Rightarrow \frac{1,03 \times 10^9 + 7,45 \times 10^9}{2} \\
 &= \frac{8,48 \times 10^9}{2} \\
 &= \mathbf{4,24 \times 10^9}
 \end{aligned}$$

12. P₉ (perlakuan 2% Asap Cair, 20% garam. Hari ke 4)

$$\frac{X_7}{X_8} \geq 2$$

$$\frac{73}{36} \geq 2 \Rightarrow 73 \times 10^7 = \mathbf{7,3 \times 10^8}$$

Lampiran 4

Dokumen Penelitian

a. Alat dan Bahan

a. Alat Penelitian



Timbangan Digital



Hot Plate dan *magnetic stirrer*



Autoklaf



Mikro Pipet



Laminar Air Flow (LAF)



Inkubator



Blue Tip

b. Bahan Penelitian



Ikan kakap merah



Asap cair

2. Metode Penelitian



Penirisan ikan setelah direndam selama 24 jam sesuai perlakuan



Sampel hari ke- 0



Sampel hari ke- 2



Sampel hari ke- 4



Jumlah colony yang tumbuh